

IN THE CLAIMS:

Please amend the Claims as follows:

[[1-47]]1-52. Canceled

[[48]]53. (Previously Presented) An EPOa-hSA fusion protein, wherein the EPOa moiety is the full coding region of the human EPO sequence but wherein each amino acid residue of the EPOa moiety that serves as a site for glycosylation of the fusion protein is altered such that such a site does not serve as a site for glycosylation in the EPOa; and,

wherein both the albumin moiety and the EPOa moiety of the fusion protein is derived from a human sequence.

[[49]]54. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein said fusion protein has the formula:

R1-L-R2; R2-L-R1; or R1-L-R2-L-R1,

wherein R1 is an erythropoietin analog amino acid sequence; L is a peptide linker and R2 is a human serum albumin amino acid sequence.

[[50]]55. (Previously Presented) The EPOa-hSA fusion protein of claim 49, wherein R1 and R2 are covalently linked via said peptide linker.

[[51]]56. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein each amino acid residue which serves as an attachment point for glycosylation has been deleted.

[[52]]57. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein each amino acid residue of human EPO which serves as a site for glycosylation has been replaced with an amino acid residue which does not serve as a site for

glycosylation.

[[53]]58. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein said amino acid residue is selected from the group consisting of amino acid residues Asn24, Asn38, Asn83 and Ser126.

[[54]]59. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein said glycosylation sites altered include Ser126, Asn24, Asn38 and Asn83.

[[55]]60. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein said glycosylation sites altered are either O-linked or N-linked glycosylation sites and are altered by replacing an amino acid residue Asn or Ser with a Gln residue.

[[56]]61. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein each of the amino acid residues 24, 38, 83 and 126 have been replaced with Gln.

[[57]]62. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein each of the amino acid residues 24, 38, 83 and 126 have been deleted.

[[58]]63. (Previously Presented) The EPOa-hSA fusion protein of claim 57, wherein ~~wherein~~ each of the amino acid residues 24, 38 and 83 have been replaced with Gln and wherein said amino acid residue 126 has been replaced with Ala.

[[59]]64. (Previously Presented) The EPOa-hSA fusion protein of claim 50, wherein said peptide linker is 10 to 30 amino acids in length.

[[60]]65. (Previously Presented) The EPOa-hSA fusion protein of claim 59, wherein each of said amino acids in said peptide linker is selected from the group consisting of Gly, Ser, Asn, Thr and Ala.

[[61]]66. (Currently Amended) The EPOa-hSA fusion protein of claim 50, wherein

said peptide linker is composed of a sequence having the formula (Ser-Ser-Ser-Ser-Gly)_y (SEQ ID 5) wherein y is less than or equal to 8.

[62]67. (Currently Amended) The EPOa-hSA fusion protein of claim 59, wherein said peptide linker is composed of either 2 or 3 tandem repeats of a sequence having the formula ((Ser-Ser-Ser-Ser-Gly)₃-Ser-Pro) (SEQ ID 4).

[63]68. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein the fusion protein includes from left to right, an EPOa which includes amino acid residues Gln24, Gln38, Gln83 and Ala126, a peptide linker, and human serum albumin.

[64]69. (Currently Amended) The EPOa-hSA fusion protein of claim 48, wherein the fusion protein is from left to right, Gln24, Gln38, Gln83, Ala126 EPO, a peptide linker having the formula ((Ser-Gly-Gly-Gly-Gly)₃-Ser-Pro) (SEQ ID 4) and human serum albumin.

[65]70. (Previously Presented) The EPOa-hSA fusion protein of claim 48, wherein the EPOa-hSA fusion protein includes, from left to right, human serum albumin, a peptide linker, and an EPOa which includes amino acid residues Gln24, Gln38, Gln83 and Ala126.

[66]71. (Previously Presented) The EPOa-hSA fusion protein of claim 65, wherein the EPOa is Gln24, Gln38, Gln83, Ala126 EPO.

[67]72. (Currently Amended) The EPOa-hSA fusion protein of claim 48, wherein the fusion protein is from left to right, human serum albumin, a peptide linker having the formula ((Ser-Gly-Gly-Gly-Gly)₃-Ser-Pro) (SEQ ID 4), and Gln24, Gln38, Gln83, Ala126 EPO.

[68]73. Canceled